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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,297	07/30/2001	Shingo Ohkawa	1185.1060	8288

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EXAMINER	
ZEADE, BERTRAND	
ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/916,297	OHKAWA, SHINGO	
	Examiner	Art Unit	
	Bertrand Zeade	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1, 3-4, 6-7, 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohkawa (U.S.6,485,157).

Ohkawa ('157) discloses a light guide plate, surface light source device LCD having:

Regarding claim 1, an emission face (4) provided by a major face (3); a back face (14) opposite with the emission face (13); and a plurality of end faces (see figs. 3a-3b) for introducing light (L), the end surfaces (15, 16) including a first end face (15) extending in a first direction and a second end face (16) extending in a second direction which is generally perpendicular to the first

direction (see figs. 1-3b), wherein the back face (14) is provided with a great number of projection-like micro-reflectors (20) and a great number of ridge-like projections (21-27) for direction conversion, each of the micro-reflectors (20) having a pair of slopes (5a,5b) which meet each other as to form a ridge that gets closer with an increasing distance from the first end face (15/16) and extends in a direction generally perpendicular to the first direction, the great number of ridge-like projections extending in a direction generally parallel with the second direction (see figs. 1-3b).

Regarding claim 3, each of the ridge-like projections has a pair of slopes (5a,5b) extending in a direction generally parallel with the second direction, thereby uneven configurations being formed periodically and repeatedly along a direction generally perpendicular to the second direction (see figs. 1-3b).

Regarding claim 4, a light guide plate (1/10) having an emission face (13) provided by a major face (3/4); a back face (14) opposite with the emission face (13); and a plurality of end faces (see figs.3a-3b) for introducing light (L), the end surfaces (15,16) including a first end face (15) extending in a first direction and a second end face (16) extending in a second direction which is generally perpendicular to the first direction (see figs. 1-3b), wherein the back face (14) is provided with a great number of projection-like micro-reflectors (20) and a great number of ridge-like projections (see figs.1-3b) for direction conversion, each of the micro-reflectors (20) having a pair of slopes (5a,5b) which meet each other as to form a ridge that gets closer with an increasing distance from the first end face (15) and extends in a direction generally perpendicular

to the first direction, the great number of ridge-like projections extending in a direction generally parallel with the second direction (see figs. 1-3b).

Regarding claim 6, each of the ridge-like projections has a pair of slopes (5a,5b) extending in a direction generally parallel with the second direction, thereby uneven configurations being formed periodically and repeatedly along a direction generally perpendicular to the second direction (see figs. 1-3b).

Regarding claim 7, a light guide plate (1/10) having an emission face (4/13) provided by a major face (3); a back face (14) opposite with the emission face (13); and a plurality of end faces (see figs. 1-3b) for introducing light (L), the end surfaces (15,16) including a first end face (15) extending in a first direction and a second end face (16) extending in a second direction which is generally perpendicular to the first direction (see figs. 1-3b), wherein the back face (14) is provided with a great number of projection-like micro-reflectors (20) and a great number of ridge-like projections (see figs.1-3b) for direction conversion, each of the micro-reflectors (20) having a pair of slopes (5a,5b) which meet each other as to form a ridge that gets closer with an increasing distance from the first end face (2A) and extends in a direction generally perpendicular to the first direction, the great number of ridge-like projections extending in a direction generally parallel with the second direction (see fig. 2).

Regarding claim 9, each of the ridge-like projections has a pair of slopes (5a,5b) extending in a direction generally parallel with the second direction, thereby uneven configurations being

formed periodically and repeatedly along a direction generally perpendicular to the second direction (see figs. 1-3b).

Regarding claim 10, an emission face (4/13); a back face (14) opposite to the emission face (13/4); and a first end face (15) to introduce light (L), wherein the back face (14) is provided with a plurality of projection-like micro-reflectors (20) and a plurality of ridge-like projections (21-27) for direction conversion, each of the micro-reflectors (20) having a pair of slopes (5a,5b) which meet each other to form a ridge that gets closer with an increasing distance from the first end face (see fig. 2).

Regarding claim 11, a second end face (16), wherein the first end face extends in a first direction, the second end face extends in a second direction perpendicular to the first direction, the ridge extends perpendicular to the first direction and the ridge-like projections extend parallel to the second direction (see figs. 2-3b).

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkawa ('157).

Regarding claims 2, 5 and 8 Ohkawa ('157) discloses the claimed invention except for quadrangle pyramids.

It would have been obvious matter of design choice to use quadrangle pyramids, since applicant has not disclosed that quadrangle pyramids solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Ohkawa ('157) light diffusing elements (20).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bertrand Zeade whose telephone number is 703-308-6084. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea, can be reached on (703) 305-4939. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Examiner: Bertrand Zeade

June 6, 2003.

Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800